Cutting Optimization Software CutGLib Introduced New Options to Control Layout Sizes and Reduce Sheet Rotation Operations

1888PressRelease - Cutting optimization software library CutGLib version 2 introduced a new method to generate cutting sequence that minimizes sheet stock rotations, thus reducing the total job time. The maximum layout size options have also been added to account for cutting machine hardware limitations.

Cutting sheets of wood, metal or glass is a common, everyday activity for many industrial, manufacturing and construction companies. Material waste always accompanies this cutting, and the amount of waste strongly depends on the cutting order. Finding a way to produce less waste and use fewer sheets is not a trivial task for a person, but can be done on a computer.

Optimalon Software Ltd has developed CutGLib, a simple, high-performance software solution that performs guillotine cutting optimization and finds the best way to cut rectangular stock sheets. It is a mathematical engine poised to be used by software developers for new or existing enterprise resource planning (ERP) systems. CutGLib has been successfully used with Microsoft Dynamics ERP for linear (1D) and rectangular (2D) cutting purposes.

Version 2 of CutGLIb introduces a new feature for production shops that do not use CNC machines and perform all cutting operations manually. Guillotine cutting requires all cutting operations to be performed in a strict order, which in turn requires rotation of the sheets by 90 degrees for the next cuts.

CutGLib now provides an option "MinimizeSheetRotation" that modifies cutting sequences and effectively minimizes the number of rotation operations. Optimalon Software test cases showed reduction of rotations from 5-6 to 2-3 per sheet. That results in more than 50 percent reduction of the manual job for the cutting operator.

The cutting layout of the last used stock sheet has also been improved. CutGLib minimize the total area of the last sheet and produces more usable waste parts for future jobs. It also minimizes the total cutting length, thus reducing tool wear.

CutGLib has been providing layout minimization functionality that is very important for wood cutting, allowing the operator to load several sheets into the cutting machine and process them at once. This new version introduces an option "MaxLayoutSize" to define the maximum number of sheets allowed in one layout. This function is critical when the cutting machine's hardware limits the number of sheets it can process simultaneously.

http://www.optimalon.com

CutGLib comes with detailed documentation and several test applications for different programming languages

(C#, C++, VB.Net and Delphi). It is available freely to anybody without a registration on Optimalon Software's website.

http://www.optimalon.com/cutting_optimization_library.htm

###